

Please amend the claims as follows:

- 1. (Currently Amended) A method, comprising:
- obtaining user provided information in consequence to any user operation on a mobile terminal device;
- obtaining context information associated with said user provided information, wherein said context information is related to at least one current condition of the mobile terminal device at the time of said any user operation and includes calendar information from an electronic calendar implemented at said mobile terminal device;
- obtaining a first time information in accordance with said user provided information;
- obtaining one or more calendar entries included in said calendar information, wherein each calendar entry comprises a second time information with a start time and an end time;
- matching said first time information and each of said second time information by
 assigning a membership function to said second time information, wherein said membership
 function is a function in time, which rises from zero value at a predetermined moment in
 time before said start time of each calendar entry and becomes zero value at a predefined
 moment in time after said end time of each calendar entry, and
 deriving a membership grade value from said membership function in accordance with said
 first time information; and
- obtaining meta-information from each matching calendar entry of said one or more obtained calendar entries; and
- assigning meta-information obtained from said context information and said membership grade value to said user provided information, said membership grade value defining a measure which allows to estimate a reliability for retrieval; and
- storing said user provided information and said meta-information in a history storage in order to establish an information history functionality;

wherein said meta-information is <u>employed-employable</u> for retrieval of said user provided information by matching request information of a retrieval request with said meta-information for selecting a user provided information assigned to said meta-information matched to said request information.

- 2. (Previously Presented) Method according to claim 1, wherein said assigning comprises:
- extracting said meta-information from said context information.
- 3. (Previously Presented) Method according to claim 1, wherein said obtaining of said user provided information comprises:
- receiving user input information being generated by user operation of any input means of said mobile terminal device and/or
- receiving transaction information and/or communication information being received via any communication interface of said mobile terminal device,

wherein said user input information and/or said transaction information and/or said communication information represent said user provided information.

- 4. (Original) Method according to claim 1, wherein said assigning of said meta-information to said user provided information comprises:
- extracting labeling information and/or indexing information from said context information;
- assigning said labeling information and/or indexing information to said user provided information; and
- storing said labeling information and/or indexing information and said user provided information;

wherein said labeling information and/or indexing information is employed as said metainformation for establishing retrieval functionality of said user input history.

- 5. (Previously Presented) Method according to claim 1, wherein associating said context information with said user provided information comprises:
- generating referencing information for at least a part of said user provided information;
- storing said referencing information in a first storage area; and
- storing said part of said user provided information in a second storage area;

wherein said referencing information comprises address information which allow to retrieve said part of user provided information from said second storage area.

- 6. (CANCELED)
- 7. (CANCELED)
- 8. (CANCELED)
- 9. (Currently Amended) Method according to claim—7_1, wherein in case said first time information relates to a first period of time:
- partitioning said user provided information into a plurality information parts, each information part relates to a maximum pre-defined period of time, each information part being matched separately.
- 10. (Currently Amended) Method according to claim—7_1, wherein in case said first time information relates to a first period of time and said second time information relates to a second period of time; and in case said first period of time exceeds said second period of time:
- sectioning said user provided information into at least two information sections, one of said at least two information sections fitting with said second period of time, said one fitting information section being matched.

11. (CANCELED)

- 12. (Currently Amended) Method according to claim—7_1, wherein each of said plurality of calendar entries being included in said calendar information is semantically structured and said obtaining of meta-information from each matching calendar entry comprises:
- obtaining of meta-information from each of said matching semantically structured calendar entry.

- 13. (Previously Presented) Method according to claim 1, further comprising:
- obtaining said user provided information including user provided audio information and in parallel additional user provided information, said user provided audio information being recorded and stored;
- obtaining said context information in parallel to said user provided audio information, said context information comprising user input information generated in consequence to user action against said mobile terminal device; and
- generating meta-information comprising information about said additional user provided information and said context information.
- 14. (Previously Presented) Method according to claim 13, wherein said user input information comprises control signals related to said recording of said user provided audio information, and said method further comprises:
- on receiving a start signal: initiating said recording and storing of said user provided audio information;
- on receiving a keyword signal: initiating a recording of a user provided audio keyword information including keywords relating to said user provided audio information;
- on receiving an attach signal: associating additional information with said user provided audio information;
- on receiving a pause signal: pausing said recording and storing of said user provided audio information;
- on receiving a continue signal: resuming said recording and storing of said user provided audio information subsequently to said pausing of said recording and storing; and
- on receiving a stop signal: stopping said recording and storing of said user provided audio information and generating said recording context information.
- 15. (Previously Presented) Method according to claim 13, wherein said recording context information comprises:
- information and time information about said user provided audio information;
- time information about said user input information; and

Serial No. 10/540,440

- information about said additional user provided information being associated with the user provided audio information.

16. (Original) Method according to claim 13, wherein said generating of said recording context information comprises:

- encoding said meta-information as a document being encoded in accordance with a markup language.
- 17. (Original) Method according to claim 13, wherein said meta-information is displayed by assigning graphical elements to each information entry included in said meta-information and predicting said graphical elements illustrating the content of the meta-information and showing associations defined in said meta-information.
- 18. (Currently Amended) A method, Method according to claim 1 further comprising:
- obtaining user provided information in consequence to any user operation on a mobile terminal device, wherein said user provided information includes user provided audio information;
- obtaining context information associated with said user provided information, wherein said context information is related to at least one current condition of the mobile terminal device at the time of said any user operation;
- providing a set of code bases representing a plurality of coding symbols, each code base of said set of code bases comprising a pre-defined number of pre-defined frequencies, wherein plurality of coding symbols represents a character and symbol code table for said meta-information, wherein said set of code bases is defined within a first frequency range, wherein said first frequency range is one frequency range of a plurality of frequency ranges forming a total frequency range being applicable to said user provided audio information;
- mapping said set of code bases into at least one further frequency range out of said plurality of frequency ranges;
- mapping said meta-information into in accordance with said a plurality of coding symbols into said first frequency range and said at least one further frequency range to obtain redundancy; and

- combining user provided audio information and said mapped meta-information by embedding said mapped meta-information into said user provided audio information—; and
- storing said user provided information with said mapped meta-information in a history storage in order to establish an information history functionality;

wherein said meta-information is employable for retrieval of said user provided information by matching request information of a retrieval request with said meta-information for selecting a user provided information assigned to said meta-information matched to said request information.

- 19. (Original) Method according to claim 18, wherein said combining comprises:
- obtaining a modulation signal from said mapped meta-information;
- obtaining a modulated signal by combining said user provided audio information and said modulation signal in a frequency domain; and
- obtaining said user provided audio information having embedded said meta-information by combining said modulated signal with said user provided audio information in a time domain.

20. (CANCELED)

- 21. (Original) Method according to claim 19, wherein said obtaining of said modulated signal comprises:
- obtaining said modulated signal by multiplying said user provided audio information and said modulation signal in said frequency domain.
- 22. (Previously Presented) Method according to claim 19, wherein said obtaining of said user provided audio information having embedded said meta-information comprises:
- obtaining said user provided audio information having embedded said meta-information by adding said modulation signal and said user provided audio information in said time domain.
- 23. (Previously Presented) Method according to claim 18, further comprising:

Serial No. 10/540,440

 providing a correlation basis comprising each frequency being included in a set of code bases representing a plurality of coding symbols, said coding symbols being employed for coding said meta-information; and

- applying said correlation basis onto said user provided audio information having embedded said meta-information to extract said meta-information;

wherein said extracted meta-information being available for retrieval.

- 24. (Previously Presented) Method according to claim 23, wherein said applying comprises:
- obtaining a modulation signal from said correlation basis;
- obtaining a correlation signal from said user provided audio information by convoluting said modulation signal and said user provided audio information having embedded said metainformation in a frequency domain;
- extracting magnitude signal values from said correlation signal, said magnitude signal values corresponding to each code basis of said set of code bases; and
- evaluating said magnitude signal values to retrieve said meta-information from said user provided audio information.
- 25. (Previously Presented) Method according to claim 24, wherein said evaluating of said magnitude signals comprises:
- obtaining magnitude ratio values of each pair of said magnitude signal values;
- normalizing said magnitude ratio values; and
- evaluating said normalized magnitude ratio values of said magnitude signal values to extract said meta-information from said user provided audio information.
- 26. (Previously Presented) Method according to claim 24, wherein said correlation basis being defined in a first frequency range and said obtaining of said correlation signal comprises:
- providing a correlation basis comprising all frequencies of said set of code bases within a first frequency range of a plurality of frequency ranges;
- mapping said correlation basis into each frequency range of a plurality of frequency ranges, said plurality of frequency ranges forming a total frequency range being applicable to said user provided audio information to obtain said modulation signal; and

- obtaining said correlation signal from said user provided audio information by convoluting said modulation signal and said user provided audio information in said frequency domain.

- 27. (Previously Presented) Method according to claim 1, further comprising:
- receiving a request for retrieving, said request comprising request information for instructing to retrieve certain user provided information;
- comparing said request information with said meta-information being assigned to said user provided information which is provided by said information history functionality;
- retrieving said user provided information being assigned to said meta-information which matches said request information;
- generating a response comprising said retrieved user provided information; and
- transmitting said response.
- 28. (Original) Method according to claim 27, wherein said retrieving of said user provided information comprises:
- retrieving referencing information being associated with said user provided information to be retrieved, said referencing information comprising address information which addresses said part of user provided information being stored in a second storage area; and
- retrieving said part of user provided information from said second storage area.
- 29. (Original) Method according to claim 27, wherein said retrieving of said user provided information comprises:
- evaluating said user provided information being retrieved on the basis of said membership grade values obtained from calendar entries;

said membership grade value defining a measure which allows to estimate a reliability for retrieval.

- 30. (Previously Presented) Method according to claim 1, further comprising:
- receiving a request to store at least a part of said user provided information, wherein said request comprises said part of said user provided information and referencing information;

Serial No. 10/540,440

storing said part of said user provided information and said referencing information such that said part of said user provided information is retrievable in conjunction with said referencing

information;

- receiving a request for retrieving at least said part of said user provided information, wherein

said request comprises referencing information;

- retrieving said part of said user provided information in accordance with said referencing

information; and

generating a response including said retrieved part of said user provided information.

31. (Previously Presented) A computer readable storage medium embedded with a computer

program comprising programming code for carrying out the operations of claim 1.

32. (Currently Amended) A computer readable storage medium embedded with a computer

program comprising programming code for carrying out the operations of claim-2 18.

33. (CANCELED)

34. (CANCELED)

35. (Currently Amended) An apparatus, comprising:

- a component for obtaining user provided information and context information associated

with said user provided information, in consequence to any user operation against said

apparatus, wherein said context information is related to at least one current condition of the

mobile terminal device at the time of said any user operation and includes calendar

information from an electronic calendar implemented at said mobile terminal device;

- a component for obtaining a first time information in accordance with said user provided

information;

- a component for obtaining one or more calendar entries included in said calendar

information, wherein each calendar entry comprises a second time information with a start

time and an end time;

10

Serial No. 10/540,440

- a component for matching said first time information and each of said second time information, wherein said component for matching further assigns a membership function to said second time information, wherein said membership function is a function in time, which rises from zero value at a predetermined moment in time before said start time of each calendar entry and a becomes zero value at a predefined moment in time after said end time of each calendar entry, and derives a membership grade value from said membership function in accordance with said first time information;

- a component for obtaining meta-information from each matching calendar entry of said one or more obtained calendar entries; and
- a component for assigning meta-information obtained from said context information and said membership grade value to said user provided information, said membership grade value defining a measure which allows to estimate a reliability for retrieval wherein said context information is related to at least one current condition of the apparatus at the time of said any user operation; and
- a storage component for a storing said user provided information and said meta-information in a history storage in order to establish an information history functionality;

wherein said meta-information is <u>employed employable</u> for retrieval of said user provided information by matching request information of a retrieval request with said meta-information for selecting a user provided information being assigned to said meta-information matched to said request information.

36. (CANCELED)

- 37. (Previously Presented) The apparatus according to claim 35, further comprising:
- a component for obtaining user provided audio information and additional user provided information;
 - a component for recording said user provided audio information;
- a storage component for storing said user provided audio information;
- a component for obtaining context information in parallel to said user provided audio information, said context information comprising user input information generated in consequence on a user action against said mobile terminal device; and

- a component for generating meta-information comprising information about said additional user provided information and said context information.

38. (Currently Amended) The An apparatus according to claim 35, further comprising:

- a component for obtaining user provided information and context information associated with said user provided information, in consequence to any user operation against said apparatus, wherein said context information is related to at least one current condition of the apparatus at the time of said any user operation, wherein said user provided information includes user provided audio information;
- a set of code bases representing a plurality of coding symbols, each code base of said set of code bases comprising a pre-defined number of pre-defined frequencies, wherein said set of code bases is defined within a first frequency range, wherein said first frequency range is one frequency range of a plurality of frequency ranges forming a total frequency range within the frequency range of said user provided audio information;
- a component for mapping said set of code bases into at least one further frequency range out of said plurality of frequency ranges;
- a component for mapping said meta-information into in accordance with said a-plurality of coding symbols into said first frequency range and said at least one further frequency range; and
- a component for obtaining user provided audio information having embedded said meta-information by embedding said mapped meta-information into said user provided audio information-; and
- a storage component for a storing said user provided information with said mapped metainformation in a history storage in order to establish an information history functionality;
 wherein said meta-information is employable for retrieval of said user provided information by
 matching request information of a retrieval request with said meta-information for selecting a
 user provided information being assigned to said meta-information matched to said request
 information.
- 39. (Currently Amended) Storage device capable to provide storage capacity for organizing user provided information being provided with meta-information, comprising:

a interface component for receiving a request for storing from a mobile terminal device, for receiving a request for retrieving from said mobile terminal device, and for transmitting a response to said mobile terminal device in consequence on in response to said request for retrieving, wherein said request for storing is a request for storing at least a part of user provided information from a mobile terminal device configured to organize user provided information with meta-information based on context information associated with said user provided information, wherein said context information is related to at least one current condition of the mobile terminal device at the time of a user operation, wherein said request for storing comprisesing said a part of said-user provided information and referencing information to be stored;

wherein said request for retrieving is a request for retrieving at least a-said part of said user provided information from said mobile terminal device, said request comprising referencing information;

- a storage component for storing said part of said user provided information and said referencing information such that said part of said user provided information is retrievable in conjunction with said referencing information;
- a component for retrieving said part of said user provided information being requested with. said request for retrieving in accordance with said referencing information; and
- a component for generating a-said response including said retrieved part of said user provided information.